



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/645,807 | 08/21/2003 | Wen-Pin Lin | LIN 5-1/2100.001000 | 8034 |

46290 7590 03/23/2006

WILLIAMS, MORGAN & AMERSON
10333 RICHMOND, SUITE 1100
HOUSTON, TX 77042

EXAMINER

NGUYEN, TUAN HOANG

ART UNIT PAPER NUMBER

2618

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------|--------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/645,807 | LIN ET AL. | |
| | Examiner | Art Unit | |
| | Tuan H. Nguyen | 2643 | |

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8, 11, 16-20, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burchfiel (U.S. PUB. 2004/0092281) in view of Schulist et al. (U.S. PUB. 2006/0018289 hereinafter "Schulist").

Regarding claim 1, Burchfiel discloses receiving a request from a remote unit to provide a power level associated with a transmitting component, wherein the request is transmitted over a communications protocol (page 3 [0035] and page 4 [0036]); and providing the measured power level to the remote unit over the communications protocol (page 3 [0035] and page 4 [0036]). Burchfiel differs from the claimed invention in not specifically teaching measuring a power level of a signal provided by the transmitting component in response to receiving the request from the remote unit. However, Schulist teaches measuring a power level of a signal provided by the transmitting component in response to receiving the request from the remote unit (page

1 [0012]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Burchfiel for measuring a power level of a signal provided by the transmitting component in response to receiving the request from the remote unit, as per teaching of Schulist, because it provides controlling access to a node of a wireless communications network in which identification codes are used to differentiate access requests of different network components.

Regarding claim 2, Burchfiel further discloses determining if the measured power level is within an acceptable range (page 3 [0035]).

Regarding claim 3, Burchfiel further discloses receiving a request from the remote unit to adjust a power level of an output signal provided by the transmitting component in response to determining that the measured power level is outside the acceptable range (page 14 [0167]).

Regarding claim 4, Burchfiel further discloses adjusting the power level of an output signal provided by the transmitting component in response to determining that the measured power level is outside the acceptable range (page 14 [0167]).

Regarding claim 5, Schulist further discloses adjusting the power level comprises attenuating the output signal provided by the transmitting component by a preselected amount in response to determining that the measured power level is higher than desired

(pages 3 and 4 [0027]).

Regarding claim 6, Schulist further discloses adjusting the power level comprises decreasing an amount of attenuation applied to the output signal provided by the transmitting component by a preselected amount in response to determining that the measured power level is lower than desired (page 6 [0073]).

Regarding claim 7, Burchfiel further discloses the transmitting component is a baseband radio and wherein signal provided by the baseband radio is deliverable to one of an antenna port and a power meter, and wherein measuring the power level comprises directing the signal provided by the baseband radio to the power meter in response to receiving the request from the remote unit (page 12 [0153]).

Regarding claim 8, Schulist further discloses the transmitting component is a baseband radio, and wherein measuring the power level comprises measuring the power level of at least one of a paging channel, synchronization channel, access channel, traffic channel, and pilot channel (page 5 [0067]).

Regarding claim 11, Burchfiel discloses an article comprising one or more machine-readable storage media containing instructions that when executed enable a processor to: receive a request from a remote unit to indicate a power level of a signal provided by a transmitting component (page 3 [0035] and page 4 [0036]); determine if

the measured power level is at an acceptable level (page 2 [0019]); and adjust a power level of an output signal provided by the transmitting component by a preselected level in response to determining that the measured power level is not at the acceptable level (pages 2 and 3 [0027]). Burchfiel differs from the claimed invention in not specifically teaching determine a power level of the signal in response to receiving the request from the remote unit. However, Schulist teaches determine a power level of the signal in response to receiving the request from the remote unit (page 1 [0012]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Burchfiel for determine a power level of the signal in response to receiving the request from the remote unit, as per teaching of Schulist, because it provides controlling access to a node of a wireless communications network in which identification codes are used to differentiate access requests of different network components.

Regarding claim 16, Burchfiel further discloses the transmitting component is a baseband radio and wherein a signal provided by the baseband radio is deliverable to one of an antenna port and a power meter, wherein the instructions when executed enable the processor to direct the signal provided by the baseband radio to the power meter in response to receiving the request from the remote unit (page 12 [0153]).

Regarding claim 17, Burchfiel discloses an interface adapted to receive a request from a remote unit to adjust a transmit power level of a first component of a base station

Art Unit: 2643

(page 3 [0035] and page 4 [0036]); and provide the determined power level of the output signal of the first component to the remote unit (page 3 [0035] and page 4 [0036]). Burchfiel differs from the claimed invention in not specifically teaching a control unit communicatively coupled to the interface, the control unit adapted to: determine a power level of an output signal of the first component in response to the request.

However, Schulist teaches a control unit communicatively coupled to the interface, the control unit adapted to: determine a power level of an output signal of the first component in response to the request (page 1 [0012]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Burchfiel for a control unit communicatively coupled to the interface, the control unit adapted to: determine a power level of an output signal of the first component in response to the request, as per teaching of Schulist, because it provides controlling access to a node of a wireless communications network in which identification codes are used to differentiate access requests of different network components.

Regarding claim 18, Schulist further discloses the base station services a cellular communications system and wherein the output signal comprises at least one of a paging channel, synchronization signal, traffic channel, access channel, and pilot channel, and wherein the control unit is further adapted to determine if the measured power level is at an acceptable level (page 5 [0067]).

Regarding claim 19, Burchfiel further discloses the control is further adapted to adjust a power level of an output signal provided by the transmitting component by a preselected level in response to determining that the measured power level is not at the acceptable level (pages 2 and 3 [0027]).

Regarding claim 20, Burchfiel further discloses the control unit is adapted to adjust the power level by adjusting an amount of attenuation that is applied to the output signal (pages 2 and 3 [0027]).

Regarding claim 31, Burchfiel discloses receiving a request from a remote unit to provide a power level associated with a transmitting component, wherein the request is transmitted over a communications protocol (page 3 [0035] and page 4 [0036]); and providing the measured power level to the remote unit over the communications protocol (page 3 [0035] and page 4 [0036]). Burchfiel differs from the claimed invention in not specifically teaching measuring a power level of a signal provided by the transmitting component in response to receiving the request from the remote unit. However, Schulist teaches measuring a power level of a signal provided by the transmitting component in response to receiving the request from the remote unit (page 1 [0012]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Burchfiel for measuring a power level of a signal provided by the transmitting component in response to receiving the request from the remote unit, as per teaching of Schulist, because it provides controlling access to a

node of a wireless communications network in which identification codes are used to differentiate access requests of different network components.

3. Claims 9 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burchfiel (U.S. PUB. 2004/0092281) in view of Schulist et al. (U.S. PUB. 2006/0018289 hereinafter "Schulist") as applied to claims above, and further in view of Evans et al. (U.S. PUB. 2004/0257988 hereinafter "Evans").

Regarding claim 9, Burchfiel and Schulist, in combination, fails to disclose the communications protocol is a high-level data link control protocol, wherein the transmitting component is associated with a base station of a cellular communications system, and wherein the remote unit is located in a mobile services switching center associated with the base station. However, Evans teaches the communications protocol is a high-level data link control protocol, wherein the transmitting component is associated with a base station of a cellular communications system, and wherein the remote unit is located in a mobile services switching center associated with the base station (pages 3 and 4 [0038]). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Evans into view of Burchfiel and Schulist, in order to provide a data transmission system for determining whether to allow transmission of data, the data transmission system comprising: a source for transmitting data destined for a destination over a network.

Regarding claim 14, Evans further discloses the transmitting component is associated with a base station of a cellular communications system, wherein the instructions when executed enable the processor to receive the request over a communications protocol from a mobile services switching station associated with the base station (pages 3 and 4 [0038]).

Regarding claim 15, Evans further discloses the instructions when executed enable the processor to provide the measured power level to the remote unit located at the mobile services switching center (pages 3 and 4 [0038]).

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burchfiel (U.S. PUB. 2004/0092281) in view of Schulist et al. (U.S. PUB. 2006/0018289 hereinafter "Schulist") and Evans et al. (U.S. PUB. 2004/0257988 hereinafter "Evans") as applied to claims above, and further in view of Mortazavi et al. (U.S. PUB. 2002/0188764 hereinafter "Mortazavi").

Regarding claim 10, Burchfiel, Schulist, and Evans in combination, fails to disclose the base station comprises at least a second transmitting component, wherein measuring the power level comprises deactivating the second transmitting component before measuring the power level. However, Mortazavi teaches the base station comprises at least a second transmitting component, wherein measuring the power level comprises deactivating the second transmitting component before measuring the

power level (page 2 [0016]). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Mortazavi into view of Burchfiel, Schulist, and Evans, in order to provide an exception handler allowing asynchronous invocation of remote objects.

5. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burchfiel (U.S. PUB. 2004/0092281) in view of Schulist et al. (U.S. PUB. 2006/0018289 hereinafter "Schulist") as applied to claim 11 above, and further in view of Kobayashi et al. (U.S. PAT. 5,574,993 hereinafter "Kobayashi").

Regarding claim 12, Burchfiel and Schulist, in combination, fails to disclose the instructions when executed enable the processor to increase the power of the output signal by decreasing an amount of attenuation that is applied to the output signal. However, Kobayashi teaches the instructions when executed enable the processor to increase the power of the output signal by decreasing an amount of attenuation that is applied to the output signal (col. 9 lines 19-54). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Kobayashi into view of Burchfiel and Schulist, in order to provide a mobile communication which is capable of maintaining the linearity during a small power output similar to the linearity during a large power output for a radio-frequency power.

Regarding claim 13, Evans further discloses the instructions when executed enable the processor to decrease the power of the output signal by attenuating the output signal by a preselected amount (col. 9 lines 19-54).

6. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burchfiel (U.S. PUB. 2004/0092281) in view of Schulist et al. (U.S. PUB. 2006/0018289 hereinafter "Schulist") as applied to claims above, and further in view of Nakayama (U.S. PUB. 2004/0180686).

Regarding claim 21, Burchfiel and Schulist, in combination, fails to disclose a power meter, wherein the control unit is adapted to provide the output signal of the first component to the power meter. However, Nakayama teaches a power meter, wherein the control unit is adapted to provide the output signal of the first component to the power meter (page 2 [0026]). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Nakayama into view of Burchfiel and Schulist, in order to provide a transmission output circuit can always perform correct transmission power control, and can detect the abnormality of transmission power.

Regarding claim 22, Evans further discloses a switch device adapted to receive the output signal from the first component and adapted to provide the output signal to at

least one of an antenna port and the power meter in response to receiving a signal from the control unit (page 6 [0087]).

7. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burchfiel (U.S. PUB. 2004/0092281) in view of Schulist et al. (U.S. PUB. 2006/0018289 hereinafter "Schulist") as applied to claim 17 above, and further in view of Mortazavi et al. (U.S. PUB. 2002/0188764 hereinafter "Mortazavi").

Regarding claim 23, Burchfiel and Schulist, in combination, fails to disclose the base station comprises a second component, and wherein the control unit is adapted to deactivate the second component of the base station before determining the power level of the output signal of the first component. However, Mortazavi teaches the base station comprises a second component, and wherein the control unit is adapted to deactivate the second component of the base station before determining the power level of the output signal of the first component (page 2 [0016]). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Mortazavi into view of Burchfiel and Schulist, in order to provide an exception handler allowing asynchronous invocation of remote objects.

8. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burchfiel (U.S. PUB. 2004/0092281) in view of Schulist et al. (U.S. PUB. 2006/0018289 hereinafter

"Schulist"), and Mortazavi et al. (U.S PUB. 2002/0188764 hereinafter "Mortazavi") as applied to claims above, and further in view of Kim (U.S PAT. 6,701,136).

Regarding claim 24, Burchfiel, Schulist, and Mortazavi in combination, fails to disclose the first component is a baseband radio associated with an alpha sector of a first carrier and the second component is a baseband radio associated with the alpha sector of a second carrier. However, Kim teaches the first component is a baseband radio associated with an alpha sector of a first carrier and the second component is a baseband radio associated with the alpha sector of a second carrier (Fig. 1 col. 2 lines 20-22). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Kim into view of Burchfiel, Schulist, and Mortazavi, in order to detection and setting of the optimal transmission attenuation values for multiple CDMA channels, thereby reducing time and cost for the detection and setting.

9. Claims 25 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burchfiel (U.S PUB. 2004/0092281) in view of Benveniste (U.S PUB. 2003/0064745).

Regarding claim 25, Burchfiel discloses a communications system, comprising: a base station communicatively coupled to the remote unit over a communications protocol, the base station adapted to: receive the request (page 3 [0035]); measure a

Art Unit: 2643

power level of a signal provided by a transmitting component (page 3 [0035]); determine if the measured power level is at an acceptable level (page 2 [0019]); and adjust a power level of an output signal provided by the transmitting component by a preselected level in response to determining that the measured power level is not at the acceptable level (pages 2 and 3 [0027]). Burchfiel differs from the claimed invention in not specifically teaching a remote unit adapted to provide a request to calibrate a transmit power level. However, Benveniste teaches a remote unit adapted to provide a request to calibrate a transmit power level (page 10 [0163]). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Burchfiel for a remote unit adapted to provide a request to calibrate a transmit power level, as per teaching of Benveniste, because it provides Software coordinates the data collection, RF power setting and channel assignment.

Regarding claim 30, Burchfiel further discloses the base station is associated with at least one of a local area network and a cordless communications system (page 5 [0053]).

10. Claims 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burchfiel Burchfiel (U.S PUB. 2004/0092281) in view of Benveniste (U.S PUB. 2003/0064745) as applied to claims above, and further in view of Kim (U.S PAT. 6,701,136).

Regarding claim 26, Burchfiel and Benveniste, in combination, fails to disclose the base station is a base station for a cellular communications system. However, Kim teaches the base station is a base station for a cellular communications system (col. 1 line 45 through col. 2 line 15). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Kim into view of Burchfiel and Benveniste, in order to detection and setting of the optimal transmission attenuation values for multiple CDMA channels, thereby reducing time and cost for the detection and setting.

Regarding claim 27, Kim further discloses the base station is adapted to provide a three-carrier, three-sector coverage (Fig. 1 col. 2 lines 20-22).

11. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burchfiel Burchfiel (U.S. PUB. 2004/0092281) in view of Benveniste (U.S. PUB. 2003/0064745) and Kim (U.S. PAT. 6,701,136) as applied to claims above, and further in view of Rath (U.S. PUB. 2005/0068902).

Regarding claim 28, Burchfiel, Benveniste, and Kim in combination, fails to disclose the base station is adapted to provide a six-carrier, six-sector coverage. However, Rath teaches the base station is adapted to provide a six-carrier, six-sector coverage (Fig. 2 page 2 [0040] and page 3 [0051]). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing

of Rath into view of Burchfiel, Benveniste, and Kim, in order to provide a combination of high data rates to a large number of users and >99% coverage to potential customers in a service area.

12. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burchfiel Burchfiel (U.S PUB. 2004/0092281) in view of Benveniste (U.S PUB. 2003/0064745) as applied to claim 25 above, and further in view of Evans et al. (U.S PUB. 2004/0257988 hereinafter "Evans").

Regarding claim 29, Burchfiel and Benveniste, in combination, fails to disclose the remote unit is located at a mobile services switching center associated with the base station. However, Evans teaches the remote unit is located at a mobile services switching center associated with the base station (pages 3 and 4 [0038]). Therefore, it is obvious to one of ordinary skill in the art at the time the invention was made to incorporate the disclosing of Evans into view of Burchfiel and Benveniste, in order to provide a data transmission system for determining whether to allow transmission of data, the data transmission system comprising: a source for transmitting data destined for a destination over a network.

Conclusion

13. Any response to this action should be mailed to:

Art Unit: 2643

Mail Stop_____ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571) 272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2643

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Nguyen
Examiner
Art Unit 2643


NAY MAUNG
SUPERVISORY PATENT EXAMINER